

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO HLZ-001US	SERIAL NO. 10/019067
C1S LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Mats Paulsson et al.	FILING DATE June 28, 2002
		GROUP Not Yet Assigned	

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES NO
GC	A2	DE 19630557 A1	01/98	Germany			Abstr.

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

Examiner

/Gary Counts/

Date Considered

10/24/2006

***EXAMINER:**

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



DEC 05 2005

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PATENT TRADEMARK
OFFICE
FEE
FORM 1449A/B/PTO**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet	1	of	1	Attorney Docket Number	HLZ-001US
-------	---	----	---	------------------------	-----------

Complete if Known

Application Number	10/019067-Conf. #7795
Filing Date	June 28, 2002
First Named Inventor	Mats PAULSSON
Art Unit	1641
Examiner Name	G. W. Counts

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (<i>if known</i>)				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *CITE NO.: Those application(s) which are marked with a single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(ii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
GC	C1	International Search Report to PCT/EP00/06025 (June 28, 2000), 4 pages	
GC	C2	International Preliminary Examination Report for PCT/EP00/06025 (June 28, 2000), 7 pages	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Gary Counts/	Date Considered	10/24/2006
--------------------	---------------	-----------------	------------

APPLICANT FACSIMILE OF FORM PTO-1448 REV 7-80		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO HLZ-001US	SERIAL NO. 10/019067
C INST OF PUBLICATIONS OBTAINED BY APPLICANT (Use several sheets if necessary)		APPLICANT		
MAR 25 2002 U.S. PATENT & TRADEMARK OFFICE		Sardy, Miklos et al.	FILING DATE	GROUP
MAR 26 2002		December 21, 2001		

MAIL DATE
U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

GC	A1	Andberg, M. et al. "Mutation of tyrosine 383 in leukotriene A ₄ hydrolase allows conversion of leukotriene A ₄ into 5S,6S-dihydroxy-7,9-trans-11,14-cis-eicosatetraenoic acid. Implications for the epoxide hydrolase mechanism," <i>J. Biol. Chem.</i> 1997 Sep 12;272(37):23057-63
GC	A2	Barrett, A.J. et al. Eds. "336. Introduction: family M1 of membrane alanyl aminopeptidase," in <i>Handbook of proteolytic enzymes</i> 1998 Oct; pp. 994-996
GC	A3	Blomster, M. et al. "Evidence for a catalytic role of tyrosine 383 in the peptidase reaction of leukotriene A ₄ hydrolase," <i>Eur. J. Biochem.</i> 1995 Aug 1;231(3):528-34
GC	A4	Byrum, R.S. et al. "Determination of the contribution of cysteinyl leukotrienes and leukotriene B ₄ in acute inflammatory responses using 5-lipoxygenase- and leukotriene A ₄ hydrolase-deficient mice," <i>J. Immunol.</i> 1999 Dec 15;163(12):6810-9
GC	A5	Chen, X.-S. et al. "Role of leukotrienes revealed by targeted disruption of the 5-lipoxygenase gene," <i>Nature</i> 1994 Nov;372:179-182
GC	A6	Crameri, A. et al. "DNA shuffling of a family of genes from diverse species accelerates directed evolution," <i>Nature</i> 1998 Jan 15;391(6664):288-91
GC	A7	Devchand, P.R. et al. "The PPARalpha-leukotriene B ₄ pathway to inflammation control," <i>Nature</i> 1996 Nov 7;384(6604):39-43
GC	A8	Dittmann, K.H. et al. "MK-886, a leukotriene biosynthesis inhibitor, induces antiproliferative effects and apoptosis in HL-60 cells," <i>Leuk. Res.</i> 1998 Jan;22(1):49-53
GC	A9	Drazen, J.M. et al. "Treatment of asthma with drugs modifying the leukotriene pathway," <i>N. Engl. J. Med.</i> 1999 Jan 21;340(3):197-206
GC	A10	Evans, J.F. "Leukotriene A ₃ . A poor substrate but a potent inhibitor of rat and human neutrophil leukotriene A ₄ hydrolase," <i>J. Biol. Chem.</i> 1985 Sep 15;260(20):10966-70
GC	A11	Ford-Hutchinson, A.W. et al. "Leukotriene B ₄ , a potent chemokinetic and aggregating substance released from polymorphonuclear leukocytes," <i>Nature</i> 1980 July 17;286:264-65
GC	A12	Funk, C.D. et al. "Molecular cloning and amino acid sequence of leukotriene A ₄ hydrolase," <i>Proc. Natl. Acad. Sci. USA</i> 1987 Oct;84(19):6677-81
GC	A13	Griffiths, R.J. et al. "Leukotriene B ₄ plays a critical role in the progression of collagen-induced arthritis," <i>Proc. Natl. Acad. Sci. USA</i> 1995 Jan 17;92(2):517-21
GC	A14	Griffiths, R.J. et al. "Collagen-induced arthritis is reduced in 5-lipoxygenase-activating protein-deficient mice," <i>J. Exp. Med.</i> 1997 Mar 17;185(6):1123-9

Examiner	/Gary Counts/	Date Considered
		10/24/2006

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO HLZ-001US	SERIAL NO. 10/019067	
LIST OF PUBLICATIONS CITED BY APPLICANT Use several sheets if necessary				APPLICANT Sardy, Miklos et al.		
MAR 25 2002 MAR 26 2002				FILING DATE December 21, 2001	GROUP	
PATENT & TRADEMARK OFFICE PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

GC	B1	Haeggström, J.Z. et al. "Leukotriene A ₄ hydrolase: structural and functional properties of the active center," <i>J. Lipid Mediat.</i> 1993 Mar-Apr;6(1-3):1-13
GC	B2	Hogg, J.H. et al. "Probing the activities and mechanisms of leukotriene A ₄ hydrolase with synthetic inhibitors," <i>Chem. Eur. J.</i> 1998;4(9):1698-1713
GC	B3	Kuchner, O. et al. "Directed evolution of enzyme catalysts," <i>Trends Biotechnol.</i> 1997 Dec;15(12):523-30
GC	B4	Labaudinière, R. et al. "ω -[(ω-Arylalkyl)thienyl]alkanoic acids: from specific LTA ₄ hydrolase inhibitors to LTB ₄ receptor antagonists," <i>J. Med. Chem.</i> 1992 Aug 21;35(17):3170-9
GC	B5	Lewis, R.A. et al. "Leukotrienes and other products of the 5-lipoxygenase pathway. Biochemistry and relation to pathobiology in human diseases," <i>N. Engl. J. Med.</i> 1990 Sep 6;323(10):645-55
GC	B6	Lorsch, J.R. et al. "In vitro evolution of new ribozymes with polynucleotide kinase activity," <i>Nature</i> 1994 Sep 1;371(6492):31-6
GC	B7	Medina, J.F. et al. "Leukotriene A ₄ hydrolase: determination of the three zinc-binding ligands by site-directed mutagenesis and zinc analysis," <i>Proc. Natl. Acad. Sci. USA</i> 1991 Sep 1;88(17):7620-4
GC	B8	Ménard, A. et al. "The cytotoxic activity of <i>Bacillus anthracis</i> lethal factor is inhibited by leukotriene A ₄ hydrolase and metallopeptidase inhibitors," <i>Biochem. J.</i> 1996 Dec 1;320 (Pt 2):687-91
GC	B9	Mueller, M.J. et al. "Leukotriene A ₄ hydrolase: mapping of a heicosapeptide involved in mechanism-based inactivation," <i>Proc. Natl. Acad. Sci. USA</i> 1995 Aug 29;92(18):8383-7
GC	B10	Mueller, M.J. et al. "Leukotriene A ₄ hydrolase: protection from mechanism-based inactivation by mutation of tyrosine-378," <i>Proc. Natl. Acad. Sci. USA</i> 1996 Jun 11;93(12):5931-5
GC	B11	Mueller, M.J. et al. "Leukotriene A ₄ hydrolase, mutation of tyrosine 378 allows conversion of leukotriene A ₄ into an isomer of leukotriene B ₄ ," <i>J. Biol. Chem.</i> 1996 Oct 4;271(40):24345-8
GC	B12	Nord, K. et al. "Binding proteins selected from combinatorial libraries of an alpha-helical bacterial receptor domain," <i>Nat. Biotechnol.</i> 1997 Aug;15(8):772-7
GC	B13	Orning, L. et al. "Inhibition of leukotriene A ₄ hydrolase/aminopeptidase by captopril," <i>J. Biol. Chem.</i> 1991 Sep 5;266(25):16507-11
GC	B14	Orning, L. et al. "The bifunctional enzyme leukotriene- A ₄ hydrolase is an arginine aminopeptidase of high efficiency and specificity," <i>J. Biol. Chem.</i> 1994 Apr 15;269(15):11269-73

Examiner <i>/Gary Counts/</i>	Date Considered
----------------------------------	-----------------

10/24/2006

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO HLZ-001US	SERIAL NO. 10/019067
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT Sardy, Miklos et al.	
MAR 25 2002		FILING DATE December 21, 2001	GROUP

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

U.S. PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

GC	C1	Owman, C. et al. "The leukotriene B ₄ receptor functions as a novel type of coreceptor mediating entry of primary HIV-1 isolates into CD4-positive cells," <i>PNAS. USA</i> 1998 Aug 4;95(16):9530-4
GC	C2	Rola-Pleszczynski, M. et al. "Leukotrienes augment interleukin 1 production by human monocytes," <i>J. Immunol.</i> 1985 Dec;135(6):3958-61
GC	C3	Samuelsson, B. "Leukotrienes: mediators of immediate hypersensitivity reactions and inflammation," <i>Science</i> 1983 May 6;220(4597):568-75
GC	C4	Samuelsson, B. et al. "Leukotrienes and lipoxins: structures, biosynthesis, and biological effects," <i>Science</i> 1987 Sep 4;237(4819):1171-6
GC	C5	Serhan, C.H. et al. "Lipid mediator networks in cell signaling: update and impact of cytokines," <i>FASEB J.</i> 1996 Aug;10:1-12
GC	C6	Tsuge, H. et al. "Crystallization and preliminary X-ray crystallographic studies of recombinant human leukotriene A ₄ hydrolase complexed with bestatin," <i>J. Mol. Biol.</i> 1994 May 20;238(5):854-6
GC	C7	Vallee, B.L. et al. "Active-site zinc ligands and activated H ₂ O of zinc enzymes," <i>Proc. Natl. Acad. Sci. USA</i> 1990 Jan;87(1):220-4
GC	C8	Wetterholm, A. et al. "Recombinant mouse leukotriene A ₄ hydrolase: a zinc metalloenzyme with dual enzymatic activities," <i>Biochim. Biophys. Acta</i> 1991 Oct 25;1080(2):96-102
GC	C9	Wetterholm, A. et al. "Leukotriene A ₄ hydrolase: abrogation of the peptidase activity by mutation of glutamic acid-296," <i>Proc. Natl. Acad. Sci. USA</i> 1992 Oct 1;89(19):9141-5
GC	C10	Wetterholm, A. et al. "Potent and selective inhibitors of leukotriene A ₄ hydrolase: effects on purified enzyme and human polymorphonuclear leukocytes," <i>J. Pharmacol. Exp. Ther.</i> 1995 Oct;275(1):31-7
GC	C11	Yamaoka, K.A. et al. "Leukotriene B ₄ enhances activation, proliferation, and differentiation of human B lymphocytes," <i>J. Immunol.</i> 1989 Sep 15;143(6):1996-2000
GC	C12	Yokomizo, T. et al. "A G-protein-coupled receptor for leukotriene B ₄ that mediates chemotaxis," <i>Nature</i> 1997 Jun 5;387(6633):620-4
GC	C13	Yokomizo, T. et al. "A second leukotriene B ₄ receptor, BLT2. A new therapeutic target in inflammation and immunological disorders," <i>J. Exp. Med.</i> 2000 Aug 7;192(3):421-32
GC	C14	Yuan, W. et al. "Novel tight-binding inhibitors of leukotriene A ₄ hydrolase," <i>J. Am. Chem. Soc.</i> 1992 April;114:6552-53
GC	C15	GenPept Acc. No. S65947; leukotriene-A4 hydrolase (EC 3.3.2.6) long isoform - human

Examiner <i>/Gary Counts/</i>	Date Considered 10/24/2006
----------------------------------	-------------------------------

*EXAMINER:	Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------